

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

**MORPHOMETRIC:**

Lake: BLOOD POND	Lake Area (ha):	10.00
Town: LANCASTER	Maximum depth (m):	6.4
County: Coos	Mean depth (m):	2.5
River Basin: Connecticut	Volume (m <sup>3</sup> ):	252000
Latitude: 44°25'40" N	Relative depth:	1.8
Longitude: 71°35'35" W	Shore configuration:	1.16
Elevation (ft): 1059	Areal water load (m/yr):	40.25
Shore length (m): 1300	Flushing rate (yr <sup>-1</sup> ):	16.00
Watershed area (ha): 880.6	P retention coeff.:	0.39
% watershed ponded: 5.5	Lake type:	natural

**BIOLOGICAL:**

		6 February 1991	30 August 1990
DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	OSCILLATORIA 65%
	#2		DINOBRYON 15%
	#3		CHRYOSOPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)			810.0
CHLOROPHYLL-A (µg/L)			8.53
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 32%	KELLICOTTIA 89%
	#2	FILINIA 21%	NAUPLIUS LARVA 5%
	#3	UNSTALKED PERITRICH 21%	
ROTIFERS/LITER		107	550
MICROCRUSTACEA/LITER		15	60
ZOOPLANKTON ABUNDANCE (#/L)		155	610
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			2.5
BOTTOM DISSOLVED OXYGEN (mg/L)		1.6	1.4
BACTERIA (fecal col., #/100 ml)	#1		< 10
	#2		< 10
	#3		

**SUMMER THERMAL STRATIFICATION:**

stratified

Depth of thermocline (m): 2.2  
Hypolimnion volume (m<sup>3</sup>): 26000  
Anoxic volume (m<sup>3</sup>): None

**CHEMICAL:**

Lake: BLOOD POND

Town: LANCASTER

	6 February 1991		30 August 1990		
DEPTH (m)	2.0	4.0	1.0	3.0	5.5
pH (units)	6.4	6.3	6.8	6.4	6.5
A.N.C. (Alkalinity)	16.3	17.7	14.3	10.7	33.6
NITRATE NITROGEN	0.10	0.13	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.54	0.87	0.56	0.44	1.59
TOTAL PHOSPHORUS	0.005	0.020	0.018	0.019	0.056
CONDUCTIVITY ( $\mu$ mhos/cm)	92.4	100.6	80.7	84.7	172.3
APPARENT COLOR (cpu)	82	92	84	51	114
MAGNESIUM			0.89		
CALCIUM			6.0		
SODIUM			6.3		
POTASSIUM			0.70		
CHLORIDE	12	14	9		27
SULFATE	6	5	4		1
TN : TP	128	50	31		28
CALCITE SATURATION INDEX			2.5		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1990**

D.O. S.D. PLANT CHL TOTAL CLASS

1	3	3	2	9	Meso.
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**COMMENTS:**

1. No public access; boat was launched at the beach of a private campground at the northern inlet end of the pond.
2. Water was a dark brown color.
3. Dominant genera of wholewater phytoplankton were Chroomonas (20%) and tiny green flagellates (15%).

# BLOOD POND

LANCASTER

*Rough Bathymetric Chart*

*DES - 1990*

*Sounded by Fathometer*



*5 ft. depth contours*

LAKE: BLOOD POND  
DATE: 08/30/90

**WEATHER: CLEAR & HOT**

SECCHI DISK (m): 2.5  
BOTTOM DEPTH (m): 6.4  
TIME: 1200

**COMMENTS:** The low dissolved oxygen value at 1 meter was real -- it was re-checked twice.

111-29

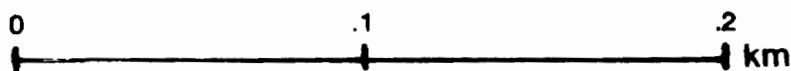
# BLOOD POND

LANCASTER

campground  
with  
beach



Aquatic Plant Distribution Map



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